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EXAMINER	
TALBOT, MICHAEL	
ART UNIT	**PAPER NUMBER**
3722	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	**Application No.** 10/678,659	**Applicant(s)** ROMPEL, MARKUS
	Examiner Michael W. Talbot	**Art Unit** 3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 26 December 2006.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-22 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-22 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 16 November 2005 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's request dated 26 December 2006 for reconsideration of the finality of the rejection of the last Office action dated 27 June 2006 is persuasive and, therefore, the finality of that action is withdrawn.

2. Claim 1 begins with the phrase, "A tool suitable for being releasably locked in a rotary hammer.....". Claim 1 ends with the phrase ".... the rearward end of the tool is maintained forwardly of the forwardmost position of the beatpiece" which clearly sets forth a relationship between the tool and the tool holder through the relative positions of the tool and the beatpiece. Therefore, claim 1 will be treated as if it is a combination of a tool and a tool holder, not just a tool.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1,2 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Rumpp et al. '444. Rumpp et al. '444 shows in Figure 3 a tool having a tool holder (3) including a locking body (5,6) and a beatpiece (2). The tool has forward and rearward ends, a tip located at the forward or cutting end and a shank portion (1) having closed end grooves (1a) positioned radially opposite one another (Figure 1) for engagement by the locking body for permitting limited axial movement of the tool between a frontmost position (defined by stop 3g) and a backmost position (defined by stop 7b). Rumpp et al. '444 shows wherein the forward end of the closed groove is located with respect to the rearward end of the tool, so that when the tool is located in the backmost position, the rearward end of the tool is maintained forwardly of a

forwardmost position of the beatpiece (gap shown between tool shank (1) and beatpiece (2) in Figure 3). Rumpp et al. '444 shows the axial length of the closed groove being greater than the axial dimension of the locking body for permitting a limited range of axial movement of the tool when locked in said tool holder.

Furthermore, this "'forwardmost" condition of the beatpiece is always maintained when the sliding sleeve is moved axially forward (to the left) and cam (7a), as shown in Figure 2, is engaged in the circumferential slot (3f) of slot (3d) to retain sliding sleeve (7) in this non-percussion drilling position (col. 5, lines 12-38).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rumpp et al. '444 in view of Wanner et al. '949. Rumpp et al. '444 does not show an axially extending drive groove extending to and open at the rearward end of the tool where the forward ends of the drive groove and closed end grooves are equidistant from the rearward end of the tool. Wanner et al. '949 shows in Figure 1 the axially extending drive groove (9) and the closed end grooves (7) located equidistant from the rearward end of the tool. In view of this teaching of Wanner et al. '949, it is considered to have been obvious to modify the tool shank of Rumpp et al. '444 to include the axially extending drive grooves located equidistant from the rearward end of the tool with that of the closed end grooves for the purpose of providing efficient torque transmission from the holder to the shank.

7. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rumpp et al. '444 in view of Peetz '232. Rumpp et al. '444 does not show the tool shank having a non-circular cross-section or a hexagonal cross section. Peetz '232 shows in Figure 2b a hexagonal profile (6) tool shank. In view of this teaching of Peetz '232, it is considered to have been obvious to modify the tool shank of Rumpp et al. '444 to include a hexagonal profile for the purpose of providing torque transmission from the holder to the shank.

8. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rumpp et al. '444 in view of Anjanappa et al. '940. Rumpp et al. '444 does not specifically reference the cutting material being of "ceramic" or an arrow shaped carbide tip fixed in a transverse notch formed at the forward end of the tool. Anjanappa et al. '940 shows in Figures 23-27 an arrow shaped carbide tip (18) fixed in a transverse notch (col. 1, lines 58-62) formed at the forward end of the tool, a rotary operation mode in Figures 23 and 25 and a hammer/chisel operation mode in Figures 24 and 26 suitable for cutting ceramic materials (col. 8, lines 36-54). In view of this teaching of Anjanappa et al. '940, it would have been obvious to one of ordinary skill in the art to modify the tool of Rumpp et al. '444 with a carbide tool capable of cutting ceramic materials taught by Anjanappa et al. '940 to enhance the versatility of the rotary hammer tool thus limiting the number of required tool apparatus to perform work at a particular work site.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rumpp et al. '444 in view of Wienhold '202. Rumpp et al. '444 does not described the tool as being a driving tool. Wienhold '202 describes the tool being capable of being used as a driving tool (column 2, lines 49-50). In view of this teaching of Wienhold '202, it is considered to have been obvious to include this alternate use to that of Rumpp et al. '444 for the purpose of increasing the functionality of the tool.

10. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rumpp et al. '444. Rumpp et al. '444 does not specifically reference the distance between the forward end of the closed groove and the rearward end of the tool being between 14mm and 20mm. Instead, Rumpp et al. '444 is silent to the measured distance. At the time of the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to select "a distance between the forward end of the closed groove and the rearward end of the tool being between 14mm and 20mm" because Applicant has not disclosed that the "distance between the forward end of the closed groove and the rearward end of the tool being between 14mm and 20mm" provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected the tool of Rumpp et al. '444, and Applicant's tool to perform equally well with either the "undisclosed distance" as taught by Rumpp et al. '444 or the claimed "distance between the forward end of the closed groove and the rearward end of the tool being between 14mm and 20mm" because both closed groove shank constructions would provide the required axial movement to position the rearward end of the tool forwardly of a forwardmost position of a beatpiece when selected to match a geometry of the tool holder/beatpiece.

Furthermore, Applicant does not provide any criticality or unexpected results for the "distance between the forward end of the closed groove and the rearward end of the tool being between 14mm and 20mm" as recited in claims 10-12.

11. Claims 13-16,19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rumpp et al. '444 in view of Obermeier et al. '682. Rumpp et al. '444 lacks a closed first groove located radially opposite a close second groove, an axially extending drive groove extending to and open at the rearward end of the tool and the tool shank being at least partially hexagonal in cross section. Obermeier et al. '682 shows in Figures 3 and 4 a closed first groove (19) located

radially opposite a close second groove (19) and an extending driving groove (11) defined by the shank (10), being at least partially hexagonal in cross sectional, and extending to an open at the rearward end of the tool and the tool shank being. In view of this teaching of Obermeier et al. '682, it would have been obvious to one of ordinary skill in the art to modify the tool of Rumpp et al. '444 to included radially opposing closed grooves and an axially extending driving groove as taught by Obermeier et al. '682 for the purpose of providing efficient torque transmission from the holder to the tool shank.

12. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rumpp et al. '444 in view of Anjanappa et al. '940. Rumpp et al. '444 does not specifically reference the cutting material being of "ceramic" or an arrow shaped carbide tip fixed in a transverse notch formed at the forward end of the tool. Anjanappa et al. '940 shows in Figures 23-27 an arrow shaped carbide tip (18) fixed in a transverse notch (col. 1, lines 58-62) formed at the forward end of the tool, a rotary operation mode in Figures 23 and 25 and a hammer/chisel operation mode in Figures 24 and 26 suitable for cutting ceramic materials (col. 8, lines 36-54). In view of this teaching of Anjanappa et al. '940, it would have been obvious to one of ordinary skill in the art to modify the tool of Rumpp et al. '444 with a carbide tool capable of cutting ceramic materials as taught by Anjanappa et al. '940 to enhance the versatility of the rotary hammer tool thus limiting the number of required tool apparatus to perform work at a particular work site.

13. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rumpp et al. '444 in view of Obermeier et al. '682, further in view of Anjanappa et al. '940. Rumpp et al. '444 in view of Obermeier et al. '682 does not specifically reference the cutting material being of "ceramic" or an arrow shaped carbide tip fixed in a transverse notch formed at the forward end of the tool. Anjanappa et al. '940 shows in Figures 23-27 an arrow shaped carbide tip (18) fixed

in a transverse notch (col. 1, lines 58-62) formed at the forward end of the tool, a rotary operation mode in Figures 23 and 25 and a hammer/chisel operation mode in Figures 24 and 26 suitable for cutting ceramic materials (col. 8, lines 36-54). In view of this teaching of Anjanappa et al. '940, it would have been obvious to one of ordinary skill in the art to modify the tool of Rumpp et al. '444 in view of Obermeier et al. '682 with a carbide tool capable of cutting ceramic materials as taught by Anjanappa et al. '940 to enhance the versatility of the rotary hammer tool thus limiting the number of required tool apparatus to perform work at a particular work site.

Response to Arguments

14. Applicant's arguments filed on 26 December 2006 have been fully considered but they are not persuasive.

15. Examiner respectfully disagrees with Applicant's assertion that Rumpp et al. '444 does not teach "a shank defining a closed groove for engagement by the locking body of the rotary hammer and for permitting limited axial movement of the tool between a frontmost position and a backmost position". Clearly Rumpp et al. '444 shows the tool (1) having an enclosed groove (1a) with a larger axial dimension as viewed in Fig. 3 than the locking body (5,6), thus the construction of the tool "permits limited axial movement". The claims as written are directed toward the tool geometry itself, and not the structure of a tool holder or how a tool holder functions with the tool in its different modes of operation.

16. In response to applicant's argument that the references fail to show the specific dimension of the forward end of the closed groove to the rearward end of the tool is between 14 mm and 20 mm, it would have been held to be within the general skill of a worker in the art to select a particular tool holder/beatpiece and tool geometry on the basis of its intended use as a matter of obvious design choice. Furthermore, Examiner is not questioning the importance of the tool dimensions, but rather the lack of criticality or unexpected results as to the specific

values chosen by the Applicant, in lieu of any other values. The choose values are most certainly going to depend on the particular tool holder/beatpiece selected so as to generate the desired result from the combination of the tool with the tool holder/beatpiece assembly.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning the content of this communication from the examiner should be directed to Michael W. Talbot, whose telephone number is 571-272-4481. The examiner's office hours are typically 8:30am until 5:00pm, Monday through Friday. The examiner's supervisor, Mrs. Monica S. Carter, may be reached at 571-272-4475.

In order to reduce pendency and avoid potential delays, group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at FAX number 571-273-8300. This practice may be used for filling papers not requiring a fee. It may also be used for filing papers, which require a fee, by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Michael W. Talbot of Art Unit 3722 at the top of your cover sheet.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MWT
Examiner
2 March 2007

Monica S. Carter
MONICA CARTER
SUPERVISORY PATENT EXAMINER